Message

From: McNeal, Dave [Mcneal.Dave@epa.gov]

Sent: 8/16/2019 3:28:41 PM

To: Worley, Gregg [Worley.Gregg@epa.gov]; Dressler, Jason [Dressler.Jason@epa.gov]

Subject: FW: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Attachments: Kinder_Morgan_MLV_mbm_krm.docx; KM_MLV_Applicability_region 4_BIWeekly08_08_final.docx

The second attachment to Marcia's email is the marked up version of my original draft letter. The next-to-last paragraph in the draft letter recommended that Kinder Morgan contact Region 4 to explore the possibility of getting on a compliance schedule if they don't complete repairs by August 21, but Marcia deleted the paragraph.

David McNeal EPA Region 4 404-562-9102

From: Mia, Marcia <Mia.Marcia@epa.gov> Sent: Thursday, August 08, 2019 10:04 AM To: McNeal, Dave <Mcneal.Dave@epa.gov> Cc: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: FW: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Hi dave,

Here are our comments. It looks terrible in RLSO, but it is mostly adding things.

I had hoped we might find more about the boundary of the compressor station, but neither Karen nor I have been able to. Clearly a fence is a boundary and if there is not a stationary source question, then it seems like plain reading to Karen and me. But my DRA asked the simple question — what if they moved the fence (or fenced the MLV separately), which got me scratching my head. In any event, that is not the question they asked so we are answering based on the facts presented.

Are you joining the OC Bi-Weekly today? Anyone else from R4? We go first. Here is the final briefing paper which went up.

Marcia B Mia
Air Branch
Office of Compliance
2227A WJCS
U.S. Environmental Protection Agency
202-564-7042

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From: Marsh, Karen < Marsh, Karen@epa.gov > Sent: Thursday, August 08, 2019 9:29 AM
To: Mia, Marcia < Mia. Marcia@epa.gov >

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Marcia,

I agree with your comments and made 2 very minor editorial changes. I also haven't found anything on the boundary for a compressor station. I reached out to Jodi to see if she remembers anything and will let you know if we track anything down on our end.

Karen

Karen R. Marsh, PE US EPA, OAQPS, Sectors Policies and Programs Division Fuels and Incineration Group 109 TW Alexander Drive, Mail Code E143-05 Research Triangle Park, NC 27711 Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Mia, Marcia < Mia.Marcia@epa.gov>
Sent: Thursday, August 01, 2019 5:58 PM
To: Marsh, Karen < Marsh.Karen@epa.gov>

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

I have to brief my DRA on this next week so put some time into this today so I would have my thoughts together in advance of that. I also mentioned this to Amy when we talked about another topic today. She generally agreed with us, so that is good I can say we ran it by OGC.

I tried to tighten it up a bit and cite reg text which gets us to our answer. I didn't find anything in the record that addressed "non compressor station" components at a compressor station. The modification argument is interesting, we did say that "fugitive emissions at compressor stations are from compressors and their associated "stuff" when we described modification (see 80 FR 56614, 3rd column)" But we didn't define the collection of fugitive emissions components that way. I took the tact of saying the modification wasn't in question, and once they had a mod they were in.

Marcia B Mia
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From: McNeal, Dave < Mcneal. Dave@epa.gov>
Sent: Wednesday, July 31, 2019 4:24 PM
To: Marsh, Karen < Marsh, Karen@epa.gov>

Cc: Mia, Marcia < Mia. Marcia@epa.gov>

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

I have attached my draft response to Kinder Morgan's applicability determination request. Comments are appreciated, and to stay on track with the flow board Region 4 set up to track these type of requests, I need to have a letter ready to route by August 12.

David McNeal EPA Region 4 404-562-9102

From: McNeal, Dave

Sent: Thursday, July 25, 2019 1:07 PM
To: Marsh, Karen < Marsh, Karen@epa.gov >
Cc: Mia, Marcia < Mia, Marcia@epa.gov >

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Hi Karen,

Thanks for the quick response. I'll draft a response to Kinder Morgan, and send it to you and Marcia by sometime early next week.

David McNeal EPA Region 4 404-562-9102

From: Marsh, Karen

Sent: Thursday, July 25, 2019 12:45 PM
To: McNeal, Dave < Mcneal. Dave@epa.gov > Cc: Mia, Marcia < Mia. Marcia@epa.gov >

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Hi again Dave,

Based on the information provided (especially the site map), I think this mainline valve is subject to the fugitive requirements in NSPS OOOOa. The compressor station is what defines the boundaries of the affected facility, not the use or purpose of the equipment, as KM tries to argue in their letter. This particular valve is located at a compressor station, therefore, it is part of the collection of fugitive emissions components at a compressor station. If a mainline valve is located along a pipeline (with no compressor station), then that mainline valve would not be subject to the fugitive requirements. That's my understanding of the intent of the requirements.

When Marcia and I spoke earlier, we both thought it would be appropriate to provide some compliance order (or similar – whatever the correct term is) in order to allow them to continue delaying repair because we certainly would not want to generate the amount of emissions or disruption to gas transmission in order to repair this leak. That's outside my purview but please keep me in the loop. We've had folks in Alaska ask similar questions about delaying repair beyond the 2 years so this would be precedent setting (as you stated).

Happy to review any draft responses. Let me know if there's anything else you'd need from me.

Karen

Karen R. Marsh, PE US EPA, OAQPS, Sectors Policies and Programs Division Fuels and Incineration Group 109 TW Alexander Drive, Mail Code E143-05 Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: McNeal, Dave

Sent: Thursday, July 25, 2019 9:40 AM
To: Marsh, Karen < Marsh. Karen@epa.gov >
Cc: Mia, Marcia < Mia. Marcia@epa.gov >

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

INTERNAL DELIBERATIVE MATERIAL DO NOT RELEASE UNDER FOIA

This morning I received a all from Kinder Morgan asking about the status of their applicability determination request. I told them that it is still under review, and I did not give them any indication of which way we are leaning on the request.

The company provided a little more detail about the impact of shutting down the pipeline to repair the mainline valve at the Thomaston Compressor Station. They said that shutting down the pipeline will cut off the natural gas supply to approximately 95 downstream compressor stations that are operated by Kinder Morgan and other pipeline companies in the Southeast.

David McNeal EPA Region 4 404-562-9102

From: McNeal, Dave

Sent: Wednesday, July 24, 2019 2:56 PM **To:** Marsh, Karen < <u>Marsh, Karen@epa.gov</u>> **Cc:** Mia, Marcia < Mia, Marcia@epa.gov>

Subject: FW: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

INTERNAL DELIBERATIVE MATERIAL DO NOT RELEASE UNDER FOIA

Karen,

I would like to get the OAQPS perspective on the NSPS Subpart OOOOa applicability question posed by Kinder Morgan (KM) in the attached July 10 letter. The company's question is whether a mainline valve co-located with a compressor station is subject to the leak detection an repair requirements in Subpart OOOOa. I have looked at Subpart OOOOa and the preambles for the Federal Registers for proposal and promulgation of the rule, but I wasn't able to find anything that clearly answers KM's question.

Since it likely that there are other compressor stations co-located with mainline valves, the response to KM's question will set a precedent that will probably have broad applicability.

The Office of Compliance's initial reaction is that the mainline valve at the Thomaston Compressor Station is subject to the LDR requirements in Subpart OOOOs. If OAQPS concurs with this position, I would like to let KM know as soon as possible because, based upon the date the lead the leak from the valve was detected (August 21, 2017), the company needs to repair the valve by August 21, 2019, in order to avoid a violation under Subpart OOOOa.

From a practical standpoint, I anticipate that KM ask EPA for an extension of the deadline to repair the mainline valve if EPA determines that it is subject to the leak detection and repair requirements in Subpart OOOOa. This is because is

because shutting the pipeline to repair the valve will result in at least a six-week disruption of the gas flow to customers in Georgia, South Carolina, and Florida. In addition, the VOC and greenhouse gas emissions caused blowing down the pipeline to repair the mainline valve are estimated to be two to three orders of magnitude higher than annual emissions from the valve at current leak rates.

If KM does pursue an extension of the deadline to repair the mainline valve, my understanding is the that the request would be processed by enforcement staff in Region 4 and/or at EPA Headquarters.

David McNeal EPA Region 4 404-562-9102

From: Mia, Marcia

Sent: Thursday, July 18, 2019 11:15 AM **To:** McNeal, Dave < Mcneal.Dave@epa.gov **Cc:** Marsh, Karen < Marsh.Karen@epa.gov

Subject: RE: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Thanks Dave,

I am cc'ing Karen Marsh – the OAQPS contact for the fugitive portions of NSPS OOOOa.

My initial reaction is that unlike the LDAR at gas plants, where we use the concept of a "process unit" (and hence an argument is a particular piece of equipment is or is not used for that process purpose) – for fugitives at compressor stations it is just a footprint. If you have a compressor station, then all components on the footprint have to be monitored. There isn't an argument as to whether it is part of a compressor "process."

Regarding the DOR under 60.5416a(b)(10) – that doesn't apply to compressor station fugitive monitoring. But they do have the DOR provisions of 60.5397a(h)(2). That gives them until the next compressor station shutdown or two years.

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From: McNeal, Dave

Sent: Thursday, July 18, 2019 10:37 AM **To:** Mia, Marcia < <u>Mia.Marcia@epa.gov</u>>

Subject: Applicability of NSPS Subpart OOOOa to gas pipeline mainline valves

Marcia,

We have received the attached applicability determination request for a Kinder Morgan (KM) owned compressor station in Thomaston, Georgia. KM is asking for a determination regarding whether a mainline valve (MLV) located within the fence line of the Thomaston Compressor Station (TCS) is subject to the equipment leak detection and repair (LDR) requirements in 40 CFR Part 60 Subpart OOOOa (Standards of

Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015).

The TCS has been in operation since 1963, and it became subject to Subpart OOOoa when a new turbine was added at the site on March 31, 2017. During the initial LDR monitoring conducted at the TCS on August 21, 2017, MLV 29 was determined to be leaking. Attachment 5 to KM's applicability determination request provides details regarding several unsuccessful attempts to repair the valve since the leak was detected in August 2017.

After reviewing Subpart OOOOa, KM believes that MLV 29 is not part of the compressor station affected facility covered by the rule, and the purpose of the company's July 10 letter was to seek a formal determination regarding the applicability of Subpart OOOOa to MLV 29.

MLVs are used to segment a gas pipeline so that the it can be blown down as rapidly as possible without creating a hazard, and the distance between valves varies between 2.5 to 10 miles. The minimum distance between any two valves on a pipeline is mandated by Department of Transportation (DOT) regulations in 49 CFR Part 192. The required distance between valves depends primarily on the population density along the pipeline, and I have attached a Word file with the regulatory text that establishes the minimum distance between MLVs.

In my opinion, the crux of KM's applicability question is whether placing a MLV within the fence line of a compressor station makes it part of an affected facility subject to the LDR provisions in NSPS Subpart OOOOa. I tend to agree with KM's conclusion that MLV 29 is not part of the compressor station affected facility at the TCS and is not subject to the LDR requirements Subpart OOOOa.

The primary basis for my conclusion regarding the applicability of MLV 29 is that the valve would clearly not be subject to Subpart OOOOa if it were not co-located with the TCS (i.e., if it were located somewhere else along the pipeline in accordance with the DOT regulations in 49 CFR Part 192). In addition, the three-page letter included as Attachment 8 to KM's July 10, 2019, letter indicates that, if the TCS were shut down and all its compressors were removed, MLV 29 would remain in its current location and continue to serve the pipeline segment associated with it. To me, this provides further support for the position that MLV 29 operates independently of the TCS and is not part an Subpart OOOOa affected facility at the TCS.

Although not directly related to the applicability of Subpart OOOOa to MLV 29, Attachment 7 to KM's July 10 letter, includes information indicating that taking MLV 29 out of service for repairs will generate VOC and greenhouse gas (GHG) emissions that are two to three orders of magnitude higher than the corresponding emissions at the current leak rates from MLV 29. Based upon leak rate monitoring conducted in March and June of 2019, the estimated annual emission rates for VOC and GHG (CO2e) from MLV 29 are 0.024 ton/yr and 72.80 metric tons/yr, respectively. Blowing down the pipeline to repair MLV 29, will generate estimated VOC and GHG emission rate of 6.62 tons and 19,921 metric tons, respectively.

Under provisions in 60 CFR 60.5416(b)(10) source owners/operators can delay the repair of a leaking component if the repair is technically infeasible without a shutdown, or if emissions resulting from an immediate repair would be greater than the fugitive emissions likely to result from a delay of the repair. Under these provisions, the repair of leaking equipment must be completed by the end of the next shutdown. If MLV 29 is considered to be part of the compressor station affected facility at the TCS, the next shutdown of the station would trigger the requirement to repair the valve, and based upon the low emission from MLV 29 at the present time, the VOC and greenhouse GHG emissions resulting from blowing down the pipeline so that repairs can be made seem to be extremely negative from and environmental perspective.

I think EPA's response to KM has the potential to be broadly applicable, since it is unlikely that the TSC is the only compressor station co-located with a MLV installed in order to comply with 49 CFR Part 192. To ensure national consistency regarding this issue, I would like to know the OECA position on KM's applicability question. If you know on an OAQPS contact that can help with this question, please let me know and/or forward a copy of my email to them. Bruce Moore was the OAQPS contact for Subpart OOOOs, but he has apparently retired, and I don't know if OAQPS currently has a contact for NSPS Subpart OOOOa questions.

David McNeal EPA Region 4 404-562-9102